# Principles of Economics I Midterm Exam 2

Dr. Rojas

# 05/24/2018

Last Name:	First Name:	
SID		

TA	Section	Indicate your section
Xuanyu (Iris)	C, H	
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Nan	O, P	
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Fernanda	A, E	
Chris	D	
Yiran	F, N	
Wenyu	B, G	

Do not start the exam until instructed to do so.

Please select only one answer.

#### 1. Consider the table below.

Good	Price Elasticity of Demand
Α	1.3
В	2.1

Which of the following is consistent with the elasticities given in Table 5-2?

- a. A is root beer, and B is carbonated beverages.
- b. A is bicycles, and B is mopeds.
- c. A is airline tickets in the short run, and B is airline tickets in the long run.
- d. A is gourmet coffee, and B is dentist's visits.

#### 2. Refer to the table below.

	First Orange	Second Orange	Third Orange
Allison	\$2.00	\$1.50	\$0.75
Bob	\$1.50	\$1.00	\$0.80
Charisse	\$0.75	\$0.25	\$0

For each of three potential buyers of oranges, the table displays the willingness to pay for the first three oranges of the day. Assume Alex, Barb, and Carlos are the only three buyers of oranges, and only three oranges can be supplied per day.

If the market price of an orange is \$0.40, then

- a. 7 oranges are demanded per day, and consumer surplus amounts to \$5.50.
- b. 6 oranges are demanded per day, and consumer surplus amounts to \$5.10.
- c. 7 oranges are demanded per day, and consumer surplus amounts to \$5.35.
- d. 6 oranges are demanded per day, and consumer surplus amounts to \$4.45.

### 3. A tax on a good

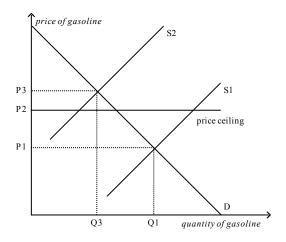
- a. raises the price that buyers effectively pay and raises the price that sellers effectively receive.
- b. raises the price that buyers effectively pay and lowers the price that sellers effectively receive.
- c. lowers the price that buyers effectively pay and raises the price that sellers effectively receive.
- d. lowers the price that buyers effectively pay and lowers the price that sellers effectively receive.

- 4. When a country allows trade and becomes an exporter of a good,
  - a. the gains of the domestic producers of the good exceed the losses of the domestic consumers of the good.
  - b. the gains of the domestic consumers of the good exceed the losses of the domestic producers of the good.
  - c. the losses of the domestic producers of the good exceed the gains of the domestic consumers of the good.
  - d. the losses of the domestic consumers of the good exceed the gains of the domestic producers of the good.

## 5. Negative externalities lead markets to produce

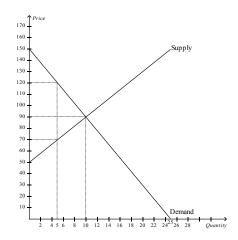
- a. greater than efficient output levels and positive externalities lead markets to produce smaller than efficient output levels.
- b. smaller than efficient output levels and positive externalities lead markets to produce greater than efficient output levels.
- c. greater than efficient output levels and positive externalities lead markets to produce efficient output levels.
- d. efficient output levels and positive externalities lead markets to produce greater than efficient output levels.

- 6. Using the midpoint method, the price elasticity of demand for a good is computed to be approximately 2. Which of the following events is consistent with a 0.1 percent increase in the price of the good?
  - a. The quantity of the good demanded decreases from 250 to 150.
  - b. The quantity of the good demanded decreases from 200 to 100.
  - c. The quantity of the good demanded decreases by 0.05 percent.
  - d. The quantity of the good demanded decreases by 0.2 percent.



When the price ceiling applies in this market, and the supply curve for gasoline shifts from  $S_1$  to  $S_2$ ,

- a. the market price will increase to P<sub>3</sub>.
- b. a surplus will occur at the new market price of  $P_2$ .
- c. the market price will stay at  $P_1$ .
- d. a shortage will occur at the new market price of  $P_2$ .



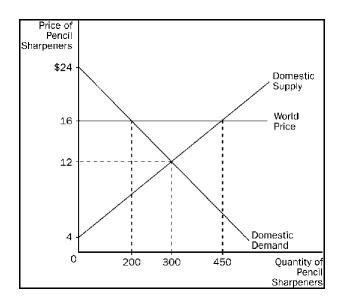
If the government imposes a price floor of \$120 in this market, then consumer surplus will decrease by

- a. \$225.
- b. \$125.
- c. \$75.
- d. \$300.

## 9. A tax on a good

- a. gives buyers an incentive to buy more of the good than they otherwise would buy.
- b. gives sellers an incentive to produce less of the good than they otherwise would produce.
- c. creates a benefit to the government, the size of which exceeds the loss in surplus to buyers and sellers.
- d. All of the above are correct.

10. Refer to the figure below. The domestic country is China.



Relative to a no-trade situation, which of the following comes with trade?

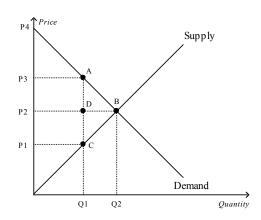
- a. Consumer surplus increases by \$1,800 and producer surplus increases by \$1,600.
- b. Consumer surplus decreases by \$1,000 and producer surplus increases by \$1,500.
- c. Consumer surplus decreases by \$1,000 and producer surplus increases by \$1,750.
- d. Total surplus increases by \$400.
- 11. If a market is characterized by a positive externality that is not the result of a technology spillover,
  - a. the socially optimal level of output is less than the equilibrium level of output, and the optimal price is greater than the equilibrium price.
  - b. the socially optimal level of output is greater than the equilibrium level of output, and the socially optimal price is less than the equilibrium price.
  - c. the socially optimal level of output is greater than the equilibrium level of output, and the socially optimal price is greater than the equilibrium price.
  - d. the socially optimal level of output is less than the equilibrium level of output, and the socially optimal price is less than the equilibrium price.

- 12. Suppose the price elasticity of supply for soccer balls is 0.3 in the short run and 1.2 in the long run. If an increase in the demand for soccer balls causes the price of soccer balls to increase by 20%, then the quantity supplied of soccer balls will increase by about
  - a. 0.67% in the short run and 0.17% in the long run.
  - b. 3% in the short run and 1.2% in the long run.
  - c. 6% in the short run and 24% in the long run.
  - d. 66.7% in the short run and 16.7% in the long run.

- 13. Which of the following is correct?
  - a. Rent control and the minimum wage are both examples of price ceilings.
  - b. Rent control is an example of a price ceiling, and the minimum wage is an example of a price floor.
  - c. Rent control is an example of a price floor, and the minimum wage is an example of a price ceiling.
  - d. Rent control and the minimum wage are both examples of price floors.

- 14. Kristi and Rebecca sell lemonade on the corner. It costs them 9 cents to make each cup. On a certain day, they sell 40 cups, and their producer surplus for that day amounts to \$12.40. Kristi and Rebecca sold each cup for
  - a. 36 cents.
  - b. 40 cents.
  - c. 45 cents.
  - d. 52 cents.

15. Refer to the figure below. The vertical distance between points A and C represents a tax in the market.

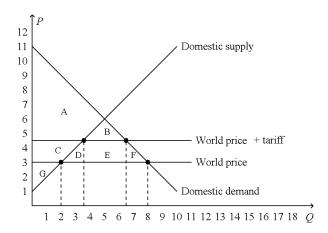


The loss in consumer surplus caused by the tax is measured by the area

- a. P1P3AC.
- b. P3ABP2.
- c. P1P3ABC.
- d. ABC.

- 16. Suppose France subsidizes French wheat farmers, while Germany offers no subsidy to German wheat farmers. As a result of the French subsidy, sales of French wheat to Germany
  - a. may prompt German farmers to invoke the unfair-competition argument.
  - b. increase the consumer surplus of German buyers of wheat.
  - c. increase the total surplus of the German people.
  - d. All of the above are correct.

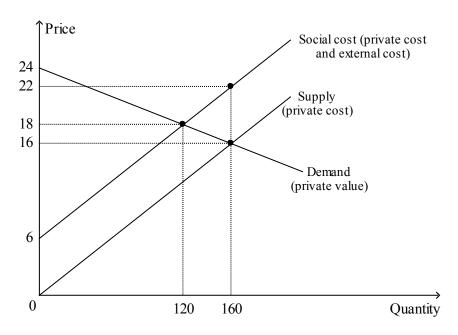
17. The figure below illustrates a tariff. On the graph, Q represents quantity and P represents price.



### The tariff

- a. decreases producer surplus by the area C, decreases consumer surplus by the area C + D + E, and decreases total surplus by the area D + F.
- b. increases producer surplus by the area C, decreases consumer surplus by the area C + D + E + F, and decreases total surplus by the area D + F.
- c. creates government revenue represented by the area B+E and decreases total surplus by the area D+E+F.
- d. increases producer surplus by the area C+G and creates government revenue represented by the area D+E+F.

- 18. Suppose a tax of \$5 per unit is imposed on a good, and the tax causes the equilibrium quantity of the good to decrease from 200 units to 100 units. The tax decreases consumer surplus by \$450 and decreases producer surplus by \$300. The deadweight loss from the tax is
  - a. \$250.
  - b. \$500.
  - c. \$750.
  - d. \$1,000.



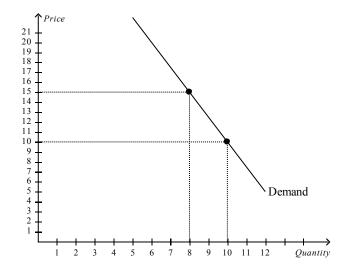
"The social cost of the last unit produced exceeds the value to buyers of the last unit produced by \$3." This statement is correct at which quantity of output?

- a. 120 units
- b. 140 units
- c. 160 units
- d. The statement is true at all quantities of output.

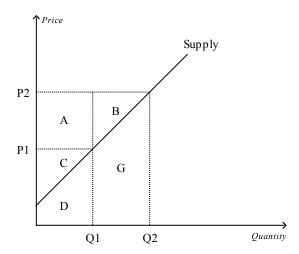
20. A binding price floor will reduce a firm's total revenue

- a. always.
- b. when demand is elastic.
- c. when demand is inelastic.
- d. never.

21. Consider the figure below.



- Suppose this demand curve is a straight, downward-sloping line all the way from the horizontal intercept to the vertical intercept. We choose two prices,  $P_1$  and  $P_2$ , and the corresponding quantities demanded,  $Q_1$  and  $Q_2$ , for the purpose of calculating the price elasticity of demand. Also suppose  $P_2 > P_1$ . In which of the following cases could we possibly find that (i) demand is elastic and (ii) an increase in price from  $P_1$  to  $P_2$  causes an increase in total revenue?
  - a.  $0 < P_1 < P_2 < \$10$ .
  - b.  $$10 < P_1 < P_2 < $15$ .
  - c.  $P_1 > $15$ .
  - d. None of the above is correct.
- 22. Suppose buyers of tequila are required to send \$1.00 to the government for every bottle of tequila they buy. Further, suppose this tax causes the effective price received by sellers of tequila to fall by \$0.80 per bottle. Which of the following statements is correct?
  - a. This tax causes the demand curve for tequila to shift downward by \$1.00 at each quantity of tequila.
  - b. The price paid by buyers is \$0.20 per bottle more than it was before the tax.
  - c. Eighty percent of the burden of the tax falls on sellers.
  - d. All of the above are correct.



## Area B represents

- a. the combined profits of all producers when the price is P2.
- b. the increase in producer surplus to all producers as the result of an increase in the price from P1 to P2.
- c. producer surplus to new producers entering the market as the result of an increase in the price from P1 to P2.
- d. that portion of the increase in producer surplus that is offset by a loss in consumer surplus when the price increases from P1 to P2.

- 24. Sandra purchases 5 pounds of coffee and 10 gallons of milk per month when the price of coffee is \$10 per pound. She purchases 6 pounds of coffee and 12 gallons of milk per month when the price of coffee is \$8 per pound. Sandra's cross-price elasticity of demand for coffee and milk is
  - a. 0.82, and they are substitutes.
  - b. -0.82, and they are complements.
  - c. 1.22, and they are substitutes.
  - d. -1.22, and they are complements.

# 25. Refer to the table below.

Quantity	Private Value	Private Cost	External Cost
1	\$40	\$20	\$7
2	\$38	\$23	\$7
3	\$36	\$26	\$7
4	\$34	\$29	\$7
5	\$32	\$32	\$7
6	\$28	\$35	\$7

Taking into account private and external costs, total surplus in the market equilibrium amounts to

- a. \$15.
- b. \$17.
- c. \$18.
- d. \$20.